

Project 2 Pseudo Code

Queue Class

1. insert(Ecountry)

IF rear of queue is equal to the max size of the queue minus 1

Then rear = -1

Increment rear by 1. Create a new Ecountry object within the queue passing all the variables from the Ecountry parameter passed into the method.

2. remove()

Create a temporary Ecountry object and store all the data from the Ecountry object in the front of the queue. Increment by 1.

IF front variable is equal to the max size

Then front variable equals 0.

Decrement nItems variable.

RETURN the temporary Ecountry object.

3. isEmpty()

RETURN true if nItems is equivalent to 0.

PriorityQueue Class

1. insert(Ecountry)

Create integer variable j.

IF nItems is equivalent to 0

Then create a new ecountry object within the priority queue that receives all the data from the Ecountry object parameter passed into the method

ELSE

For when j is equal to nItems – 1, j is also greater than or equal to 0, and decrement j by one for ever iteration of the loop

IF Ecountry parameter's population is greater than the Ecountry object at the j'th position's population

Then the Ecountry object at j+1's position now stores the data from the Ecountry object at j position, shifting the order of the objects

ELSE

BREAK

Ecountry object at j+1 is created and stores the data from the Ecountry parameter passed into the method.

Increment nItems by 1

2. remove()

RETURN the Ecountry object at the nItems position but decrement by 1 first

3. display()

Output the priority queue in the specified formatted string.